

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER-V • EXAMINATION – WINTER 2015

Subject Code: 2650004

Date: 08/12/ 2015

Subject Name: Advanced Data Base Management Systems (ADBMS)

Time: 10.30 AM TO 01.00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Define/explain following terms:
- | | |
|-----------------|-----------|
| 1. SQL/CLI | 03 |
| 2. Data Models. | 02 |
| 3. SQL*Loader | 02 |
- (b)** Discuss the guidelines for physical database design in RDBMS. **07**
- Q.2 (a)** Answer the following concept in brief.
- | | |
|---------------------------|-----------|
| 1. Prolog Versus Datalog. | 03 |
| 2. Buffering of Blocks. | 02 |
| 3. Conceptual Schema. | 02 |
- (b)** What is Spatial Database? Explain different types of Spatial queries. **07**
- OR**
- (b)** What is Temporal Database? Discuss benefits of Temporal Database giving example. **07**
- Q.3 (a)** What is write-ahead logging? Explain steal/no steal and force/ no force. **07**
- (b)** Compare the primary copy method with primary site method for distributed concurrency control. When voting method is used in distributed database? **07**
- OR**
- Q.3 (a)** Discuss the deferred update technique of recovery. What are the advantages and disadvantages of this technique? Why is it called No-UNDO/REDO method? **07**
- (b)** Discuss the merits and demerits of proving secondary indexes and primary indexes. **07**
- Q.4 (a)** Explain five level schema architecture in a federated database system. **07**
- (b)** Discuss four main control measures used to provide Security in Databases. **07**
- OR**
- Q.4 (a)** Explain Concept of Oracle Net Configuration, Service Name and Listener. **07**
- (b)** What are the goals of database tuning? Explain the process of tuning the indexes. **07**
- Q.5 (a)** Write a short note on Mobile computing architecture. **07**
- (b)** Explain characteristics of data in GIS. **07**
- OR**
- Q.5 (a)** List the object relational features included in SQL-99. Give an example with syntax. **07**
- (b)** What is multimedia database? Explain its data management issues. **07**
